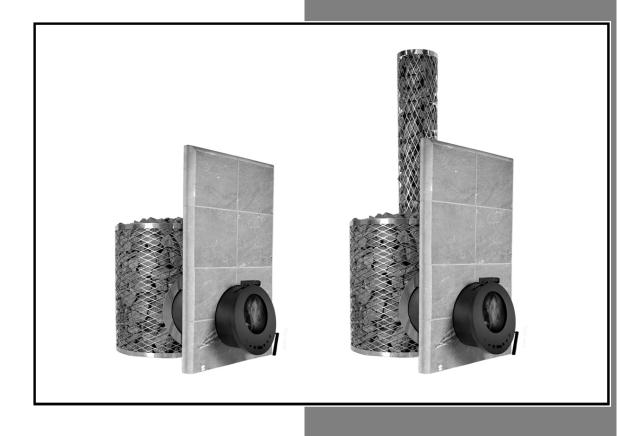


Installation instructions





IKI SL wood-burning stoves (Through the wall models)

IKI SL IKI SL Plus

Read these instructions through carefully before installing and using the stove.

These instructions for installation and use are meant for the owner of the sauna. The instruction manual must be given to the owner when installation is complete.

Make sure to store this manual for later use.

Read through the instructions before installation:

- When choosing the location for the stove, check the safety distances to inflammable materials.
- Check the weight bearing capacity of the floor as well as the connection to the chimney (whether you need a straight or an angled connector pipe), or the installation route for a new chimney pipe, if needed.
- All local regulations must be complied with during installation, including those relating to local or EU-level standards.

NOTE!

Beware of the sharp edges of the mesh frame and other parts. Always wear protective gloves and a long-sleeved shirt when handling the mesh frame and piling in stones.

Contacts

Technical support	IKI-Kiuas Ltd. / Sales	Vallila storage & pick up	Production
(mon-Fri 9-16)	Hakaniemenkatu 11	Pälkäneentie 5	Niilontie 10
+358 (0) 600 550 133	00530 Helsinki	00510 Helsinki	76150 Pieksämäki
(1,49 €/min + I.c.c.)	ikikiuas@ikikiuas.fi	vallila@ikikiuas.fi	tuotanto@ikikiuas.fi
tuki@ikikiuas.fi			

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Jatkuvalämmitteiset saunan puukiukaat asuinrakennusten sisätilojen lämmitykseen

Saunan kiuas Original IKI / (Plus)Saunan kiuas Maxi-IKI / (Plus)

DoP **10252015**

Paloturvallisuus: (syttyminen, riski viereisille rakennusosille)		Hyväksytty
mukaan lukien ilmoitettu suojaetäisyys palaviin materiaaleihin:	takana sivulla sisäkattoon	100 mm 100 mm 1100 mm
Palamistuotteiden päästöt		Hyväksytty
Pintalämpötila		Hyväksytty
Vaarallisten aineiden vapautu	NPD	
Puhdistettavuus	Hyväksytty	
Savukaasun lämpötila (ka)		411.7 °C
Mekaaninen lujuus		Hyväksytty
Lämmöntuotto ja hyötysuhde,		
 hiilimonoksidipäästö 13 % happi- pitoisuudella (O2) 		Hyväksytty (1242 mg/m³)
 hiilimonoksidipäästö (%) 13 % happi- pitoisuudella (O2) 		Hyväksytty (0.10%)
 kokonaishyötysuhde 		Hyväksytty (65.2 %)
— savukanavan veto		12 Pa
— nimellisteho		23.2 kW
— lämmöntuotto huonetilaan		15.1 kW
— polttoainelisäykset		3.5 kg
— savukaasun massavirtaus		17.7 g/s
Pitkäaikaiskestävyys		Hyväksytty
Savukaasun huippulämpötila		539.2 °C

1. SAFETY INSTRUCTIONS

The stove MUST NOT be used for any other purpose than heating the sauna, e.g. drying clothes or heating a construction site, etc.

Covering the stove during use or when it is hot is strictly prohibited.

Throwing sea water on the stones is prohibited and will cause the warranty to become void and may cause early corrosion.

Beware of the blast connection, hatch, or other metal surfaces of the stove and the stones, THEY MAY BE HOT! Always wear protective gloves, etc.

Be extra cautious when using the stove when children are present!

Beware of the sharp edges of the mesh frame and other parts. Always wear protective gloves and a long-sleeved shirt when handling the mesh frame and piling in stones.

In addition to this instruction, the EU heater standard 15821, local fire rescue authority's rules and regulations must be taken into account when installing and using the stove.

The warranty does not cover problems caused by faulty installation and improper use.

NOTE! The hatch in the stove may discolour after frequent use and the paint may show signs of wear. It is possible to apply a new coat of paint (600-degree heat resistant paint). Before painting, the hatch must be cleaned with degreeser and the surface smoothed.

2. CHECKING THE CONTENTS OF THE DELIVERY

Please check that all parts belonging to the stove are included in the delivery:

1 pc furnace

1 pc stove hatch (glass door packed in a separate cardboard box)

1 pc lower mesh frame

1 pc 45°, 90° or straight smoke pipe

1 pc ash spatula

1 pc ash grate

1 pc accessory box containing:

- 2 pcs "installation stones" for the furnace (on top of which the furnace will be placed)
- 1 pcs fire plate (to be installed in the front of the furnace)
- gloves
- hinge for the hatch

For the Plus model, the delivery includes also:

- 1 pc upper mesh frame
- 1 pc 75 cm or 100cm straight smoke pipe

2.1 Choosing the location for the stove; things to take into account:

- Safety distances to inflammable surfaces and incombustible structures (see section 2.4)
- The connection height of a possible old chimney or the installation route of a new chimney (see section 2.7)
- Floor material and weight-bearing capacity
- Note that due to the amount of stones, the IKI stove is very heavy (see section 3.2.)
- IKI wood-burning stoves are recommended to be installed into brick, ceramic or air-cooled chimneys. The outer diameter of the stove's smoke pipe is 115 mm.

2.2 The different stove models and their technical data

	Size of sauna room	Max. amount of stones	Height of stove	Diameter of stove	Length of furnace	Weight without stones
IKI SL	15-30 m ³	300 kg	75 cm	60 cm	95 cm	95 kg
IKI SL Plus	15-30 m ³	360 kg	175 cm	60 cm	95 cm	105 kg

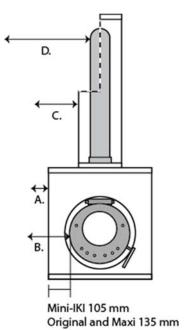
2.2 Preparation for use

- Preparatory burn: Light a fire in the stove once before laying the stones and bathing, in order to get rid of any potentially harmful residue from protective coatings or oil on the steel surfaces. This should be done outside or in a well-ventilated space.
- It is recommended that a damper is installed into the chimney to allow draught to be adjusted. There is also a small knob on the hatch that allows air flow to be regulated.
- In a full iron hatch, move the knob up to open it and down to shut. In a glass hatch the knob is moved to the right to open and to the left to shut it.
- In ordinary use, olivine-dolerite stones smaller than 10 cm in diameter, are recommended. The stones should be laid carefully to allow maximum air flow.
- Keeping flammable liquids or materials near the stove is strictly forbidden.
- The fire authorities must be notified of all soot fires, even if they have been exhausted.
- In private saunas in recreational or otherwise infrequent use, the chimneys must be swept every three years.
- In private or shared saunas in regular and frequent use, the chimneys must be swept yearly.
- The frequency with which the stones require replacing depends on the use rate. For example, in private-use saunas, the stones closest to the furnace should be checked and replaced, if needed, every second year. In shared and frequently used saunas, more often.

2.3 Safety distances to flammable structures

Please note that the gap between the furnace and the stone mesh must be filled with stones.

- A. Distance from the mesh frame, filled with stones, to the side:
 100 mm.
- B. Distance from the neck of the furnace to the side: 250 mm
- Distance from the glass hatch to the front: 500 mm
 Tip! Leave at least 1000 mm to have space to operate the stove.
- Distance from the solid hatch to the front: 500mm
 Tip! Leave 1000 mm to have space to operate the stove.
- C. Distance from the chimney pipe, filled with stones and equipped with a mesh frame, to the side: 250 mm
- Distance from the chimney pipe loaded with stones and equipped with a mesh: 500 mm upwards
- D. Distance from the chimney pipe without stones to the side: 500 mm
- Distance from the chimney pipe without stones: 1000 mm upward



2.4 Reduction of safety distances

- Safety distance can be cut down by 50% when using simple protection (i.e. 1mm metal/fibre board and a 30mm air gap)
- Safety distance can be cut down by 75 % when using double protection (double protection board and air gap)

ATTN! In the "Plus" model stoves, where the smoke pipe is also covered by stones, the safety distances are reduced by 50% compared to plain, uncovered smoke pipes.

2.5 Protective base for the stove

If the stove is to be installed on an inflammable floor surface (e.g. wooden flooring) a protective base must be laid under the stove. The protective base must be made from fireproof material and have an air gap, such as the stainless steel protective base from IKI Kiuas.

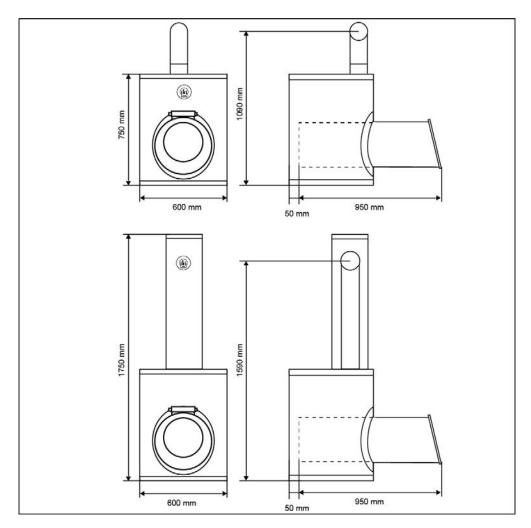
The size and shape of the protective base must adhere to the safety regulations for the stove. Note that the protective base should also extend to cover the floor area in front of the furnace's hatch.

The safety distance of 50 cm measured diagonally from the furnace to the floor in the front of the stove can be reduced by half if a stainless steel protective base with a 3-cm air gap is used.

The protective base adds approx. 65 mm to the height of the stove. This should be factored in when calculating the chimney or furnace connecting pipes.

2.6 Chimney connection height

The chimney connection height for the stoves is calculated from the floor, without a base, to the centre of the chimney pipe, when the furnace stands on its support legs. (The IKI stainless steel protective base adds approx. 67 mm to the height). The outer diameter of the chimney connection pipe is 115 mm in all IKI stoves.



2.7 Chimney connection on non-standard heights (Plus model stoves)

For the Plus model stoves, there are two alternatives for chimney connection:

- The upper mesh frame can be punctured at required height to connect to and existing chimney pipe (i.e 90 degree pipe).
- The length of the straight connection pipe can be cut down to required length
- The angled pipe can be led through the hole in mesh frame and connected to the chimney pipe. (In this case, the stones above the pipe in the upper mesh frame will not heat up and you will lose some of the stove's heating power)

OR:

• The upper mesh frame can be shortened from the bottom along with the straight pipe to decrease the height of the entire structure.

3. VENTILATION AND COMPENSATION AIR

A wood-burning stove needs sufficient income of air to burn well. The bathers in the sauna room also require oxygen-rich air for breathing. Well-functioning ventilation is also required to dry the sauna room properly after bathing. There are several ventilation systems available from various manufacturers, the suitability depends mainly on the sauna room structure.

3.1 Gravity-assisted ventilations system (Illustration 4.1)

The air to feed the fire must be led from outside the sauna, using a pipe equipped with a 50-100 mm grate and a disc valve, and directed either to the side of the stove or to floor beside the stove (for example a 50-100 mm pipe at 50-100mm height from the floor).

Fresh air for breathing can be directed beside the stove, for example with a 100-mm pipe, at 50-100 mm height, above the stove's stone base.

Exhaust air is led out of the sauna preferably through a hole equipped with a disc valve and an adjustable grid, placed between the lower and upper benches. The air should flow through a metal-lined channel built inside the wall and exit just below the roof. The exhaust air valve can also be in the ceiling or close to the ceiling on the wall opposite the stove.

Fresh air for the stove and for breathing can also be led in through a valve in the door, or a gab below it. If the door leads to a dressing room, proper ventilation of the space must be ensured. Air should be allowed to flow in quite freely during bathing and drying of the room. Make sure the air inlets do not get obstructed.

As the lit stove heats the air, it rotates inside the sauna room and moves upward. Fresh air is sucked inside from the air inlets near the floor and expelled from the outlets beside the benches or high up in the ceiling.

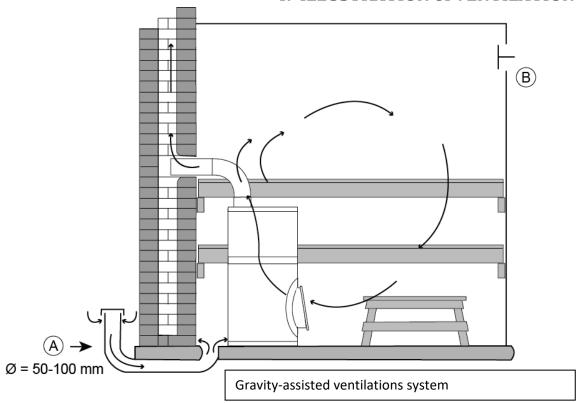
3.2 Machine-assisted ventilation

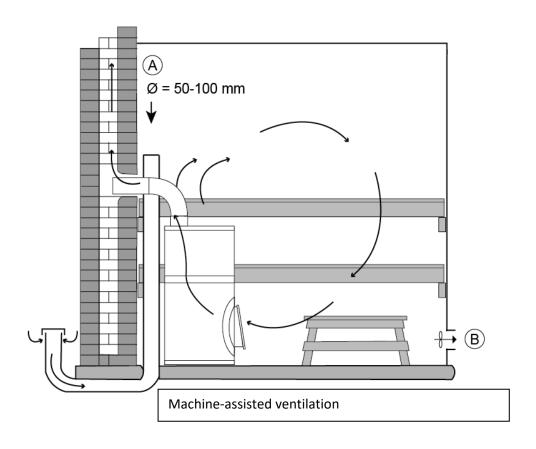
In machine assisted ventilation, the circulation of air and ventilation of the room is made more efficient, but the air flow principles and inlet and out locations are the same as in Gravity assisted.

3.3 Chimney ventilator and more than one furnace

- A chimney ventilator is not recommended with wood-burning sauna stoves. The high temperatures of the combustion gases may break the ventilator.
- If there is need for more than one furnace in the sauna, combustion gas from each furnace must be directed to separate exhaust duct. For example, a cauldron and stove combination requires a 2-passage chimney.
- The air inlets must be measured as per situation (capacity for two furnaces, adjustable valve for the amount of air).

4. ILLUSTRATION of VENTILATION





5. INSTALLATION INSTRUCTIONS

5.1 Illustrated instructions



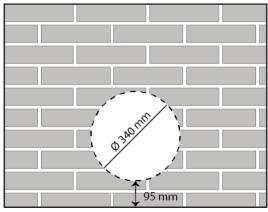
1. Check that all the parts belonging to the stove are included in the delivery. The hatch in a separate box, the ash spatula and the grate as well as an accessory box containing: 2 "installation stones", the fire plate, gloves and the hinge for the hatch.



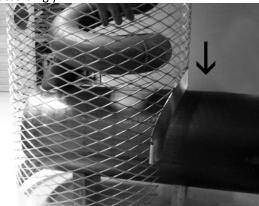
3. Place the furnace on a solid fireproof base on top of the two stones and through the hole in the wall. The wall can be up to. 300 mm wide.



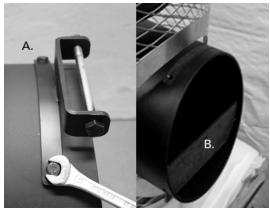
5. Attach the mesh frame to the front face with two bolts.



 Puncture a hole, minimum of 340-mm in diameter, through the wall at approx. 95 mm height. If you are using a platform, such as the protective base, below the stove, measure the correct height of the hole accordingly.



4. Lower down the mesh frame and fit it around the furnace.



 Attach the hinge to the furnace (A.) with a 13mm wrench. Install the fireplate (B.) to prevent cinders from falling to the floor and to guide air.



7. Undo the bolt in the hinge (17-mm wrench) and attach the hatch and secure in place.

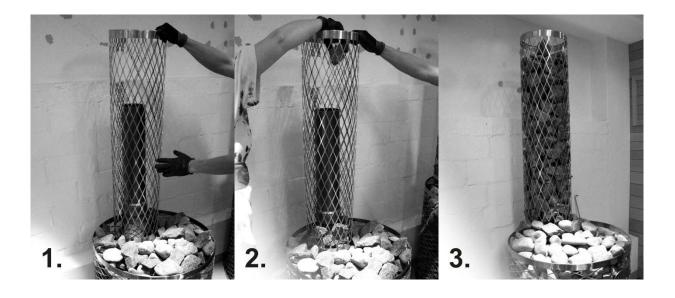


8. Check that the furnace is horizontally levelled. When the hatch is open, it must lean back securely and not fall down on its own. Attach the chimney connecting pipe to the furnace.

5.2 Installation of the upper mesh frame for PLUS model stoves

As the stove consists of a separate furnace, 2 smoke pipes and two separate frames, the installation is done in phases as follows:

- 1. Install the lower part of the stove as instructed above (in chapter 5.1).
- 2. Adjust the smoke pipe and the upper mesh with the chimney pipe. If the connection is non-standard, use a suitable sidecutter to shorten the pipe and mesh.
- 3. Pile the stones to the lower part of the stove. The stones are laid on one at a time between the upper mesh frame and the smoke pipe. Try to cover the smoke pipe as well as possible. The mesh frame settles in its place when approximately 10 cm of stones have been loaded in. We recommend at least two people work together to install the upper mesh frame.



5.3 Piling the stones the stones

Wash the stones, if needed. Check the stove's positioning complies with safety distances and that the mesh frame is securely fasted.

The space between the mesh frame and the furnace must be filled accurately, so that the stones cover the furnace all around. **Make sure you have stones underneath the furnace, as well.** Cover the stove furnace with stones so that the whole furnace is totally covered, since the direct heat radiation from the uncovered stove body can cause the surrounding structures to heat up to dangerous temperatures even outside the safety distances.

For normal use, we recommend the use of olivine, peridotite, olivine-dolerite stones smaller than 10 cm in diameter. The stones should not be placed too tightly, allowing for free air flow between the stones. If the stove is in frequent use, (public baths etc.), we recommend KERKES-ceramic sauna stones (www.kerkes.fi) on the surfaces that touch directly the heart of the stove.

NOTE: The surface of the stones will descend in time, when heated regularly. The change frequency for the stones depends on the quality of the stones and the use rate. Check the condition of the stones each year; when necessary, remove the broken stones and replace them with new ones.

6. INSTRUCTIONS FOR USE

Heating an IKI stove takes from one hour to an hour and a half, depending on the size of the sauna room and the stove. The recommended bathing temperature for the IKI stoves is approximately 55-70 degrees.

6.1 Operational instructions

- It is recommended that the fire is set to the top of the pile, which decreases emissions, but requires dry wood and takes a little bit longer.
- The wood intended for use should be brought inside the day before to allow it to dry, especially in winter time.
- Use only natural, untreated wood cut to appropriate size.
- Do not use fuel or accelerants, wood that has very high burning temperature, such as chipboard, plastics, coal, painted or otherwise surface-treated woods, or waste incl. plastics, leather, textiles, rubber or disposable nappies, compost, etc.
- Clean the ashes and remnants of previous use from the furnace.
- Open the damper of the chimney and the knob on the stove hatch to get a good flow of air.
- Light the fire on the top of the woodpile, for example with a lighter piece, cardboard packages, birch bark or chopped firewood.
- In an iron hatch the regulation of air is done by moving the knob up to open and down to shut. In a round glass hatch the move the knob to the right to open and to the left to shut.
- NOTE! We recommend the use of the installation gloves when adjusting air flow.
- Keep the hatch closed at all times, apart from ignition, adding wood and cleaning the furnace, to minimise smoke.

NOTE! When adding wood to the furnace, pull the embers to the front of the furnace against the fire plate and add 2 or 3 pieces of chopped wood on top of the embers in the front or middle of the furnace.

Ikikiuas Ltd recommends using filling max. two thirds of the furnace with firewood. There is a horizontal bar inside the furnace indicating appropriate level.



6.2 Initial and additional loads

	Initial load weight	Additional loads	Additional loads weight
SL IKI and SL IKI Plus	5 kg	Max 4 pcs	3,5 kg

6.3 Trouble-shooting

Get in touch with our customer support, in all and any problems relating to the use of the stove. The contacts for IKI-Kiuas Ltd. are written on page 2.

Some of the most commons issues and appropriate solutions are listed below:

- 1. Check the purchase receipt to see if the warranty applies (see more in section 7, page 16).
- 2. Read through the common problems below and attempt to solve them.

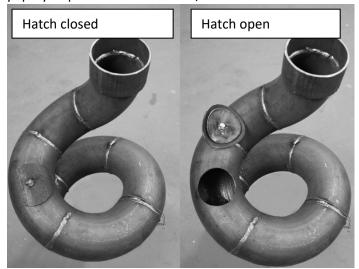
THE PROBLEM	HOW TO SOLVE IT	
No draft in the stove	 Check the chimney for blockages (e.g. bird's nest), and make sure the damper is open. Has the chimney been swept accordingly? Is there a low-pressure air front? Burn some paper in the furnace first, keeping the hatch open. Check firewood is dry. 	
The draft is too strong	 Adjust the draft from the hatch. If the chimney pipe is high, use the damper to minimise air flow. 	

Sauna does not get warm	 Is the stove big enough for the size of the sauna room? (space, insulation, log walls vs stone surfaces) Is the ventilation done correctly? Are there enough stones in the stove and have they been loaded correctly? Have they packed up too tight after use? Check the condition and quality of the stones (use olivine-dolerite stones, smaller than 10 cm in diameter)
The stones do not heat up properly	 Are there enough stones, have they been loaded correctly? Check the condition and quality of the stones (use olivine-dolerite stones, smaller than 10 cm in diameter) Is the firewood dry and has it been loaded according to the instructions?

Features of the water	Effect	Recommendation
Humus content	Colour, taste, precipitation	< 12 mg / l
Iron in the water	Colour, smell, taste, precipitation	< 0,2 mg / l
Hardness: The main ingredients	precipitation	Mn < 0,05 mg / l
manganese (Mn) and calcium (Ca)		Ca < 100 mg / I
Chlorinated water	Health hazard	PROHIBITED!
Sea water/ salt water	Fast corrosion	PROHIBITED!

6.4 Sweeping instructions

- Start by removing the stones from the stove.
- Open the hatch in the pipe (as seen in picture below). This does not require any tools.
- Sweep the pipe using pliable nylon brush. DO NOT USE a metal brush! It might damage the inner surface of the pipe and cause early corrosion.
- The spiral pipe can alternatively be cleaned using an industrial vacuum cleaner.
- Finally spray or pour some water and/or use the brush to clean up the detachable smoke pipe.



If the pipe in the Plus model stove's upper part needs sweeping, first remove the stones and detach the upper mesh frame to access the chimney pipe.

7. WARRANTY

IKI-Kiuas Ltd. grants its products a warranty according to the following conditions. The manufacturer guarantees the quality and functionality of its products for the duration of the warranty period. The warranty applies to products sold and in use within the EU. The warranty requires that the buyer of the product follows the manufacturer's instructions regarding the positioning of the stove, its installation, use and maintenance as well as those regarding the qualities of the stones. The warranty duration is two (2) years from the date of purchase. For spa and public saunas, the warranty period is one (1) year, or is determined based on the rate of usage. More information from the manufacturer.

Wood-burning Warranty is subject to the following:

- 1. In case of a defect or malfunction, always contact the manufacturer or sales agent first before searching for the cause or attempting to repair it.
- 2. The ordinary use, the stones must be exchanged at least once a year during the warranty period.
- 3. In institutional and professional use the stones must be reset three times a year and replaced at least once a year. Proof of the operation must be presented at request. Proof of purchase, reception document, or similar, acts as guarantee. Ceramic stones (except KERKES stones) are prohibited and cause the warranty to cease.
- 4. Warranty does not cover dismantling and reassembly of benches, stove or unloading and replacing of stones.
- 5. **The spare part warranty** is valid for one (1) year from the date of purchase. The replacement part will be shipped free of charge to the seller or the buyer directly. The manufacturer is not responsible for the removal and installation of the new part. The broken part must be shipped back to the manufacturer at request and at the manufacturer's expense. Contact the manufacturer for contract of carriage number before returning the part. Valid guarantee is the dealership's sales receipt, or a certificate issued by an authorized installer.
- 6. Warranty Limitations of Liability: The product owner must take good care of the product. On receiving the product, it must be checked for damages during transportation and storage. In case of such damage, immediately inform the seller of the product or the shipping company. The manufacturer is not responsible for any errors, malfunctions, or defects caused by transport or by improper storage, contrary to the manufacturer's instructions for installation, operation, maintenance, or failure to product placement in a state where the circumstances do not meet the manufacturer's recommendations.
- 7. **Error reporting**: The buyer must notify the seller of any error or malfunction as soon as it has occurred, and no later than 14 days. Notification is made to the seller of the product. Issues covered by the warranty must be made known to the seller no later than 14 days from expiration of the warranty period.
- 8. The manufacturer's actions in a warranty situation on the basis of an appropriate Warranty Statement, the manufacturer will repair or replace the defective product. Repair or replacement is done at the expense of the manufacturer. The manufacturer is entitled to choose the most appropriate option in relation to costs and time. The spare part warranty is defined in section 5 above. Replaced spare part is given a warranty in accordance with paragraph 5. The original product warranty remains otherwise unchanged. The manufacturer is not liable for reimbursing any expenses, business loss or other direct or indirect harm occurred to the buyer from damages or malfunction.
- 9. The packaging of return items is the responsibility of the sender. Products must be packed carefully, so that they do not get damaged in transit. There must be at least 5 cm cushioning around the product. Ikikiuas Ltd recommends that you always use the original product packaging; which has been specifically designed to ensure safe delivery.
- 10. Ikikiuas Ltd is not responsible for carelessly packed items that have been damaged during transportation. Costs accrued from a client side error are paid by the customer. Ikikiuas Ltd reserves the right to recover the cost from the customer, if the customer returns have been subject to, or breach the contract. Customer is charged for processing and shipping.
- 11. **Quality guarantee**: Ikikiuas Ltd guarantees the stainless-steel components in private home use for 10 years. During the warranty period raw material or manufacturing defects will be replaced free of charge. For example, throwing salt water on the heater is not allowed!
- 12. The warranty does not cover natural stone colour variations and characteristic hairline cracks, that do not affect safety and use.
- 13. Any shipping-related damages must be entered into the transport document, when the product is received, or within 7 days of arrival of goods to the recipient. Transport damage must also be reported to the shipping company's last known contact. The damaged part must be stored for later inspection. The shipping company's insurance compensates the new part and its shipment.

IKI SL Wood-burning stoves | Installation instructions



KIUKAISTA KIUKAIN